

**WHAT IS CLAIMED IS:**

- 1 1. A method comprising,  
2 in a network, encapsulating data requests generated by an  
3 application in a first system;  
4 transferring the encapsulated data requests to a second  
5 system;  
6 executing the encapsulated data requests in the second  
7 system; and  
8 processing in the first system responses generated by the  
9 encapsulated data requests in the second system.
- 1 2. The method of claim 1 in which encapsulating comprises:  
2 generating an Extensible Markup Language (XML) structure  
3 for each data request; and  
4 converting the XML structure to an XML request.
- 1 3. The method of claim 2 in which the XML structure  
2 comprises a variable stream of data stored in memory of the  
3 first system, the stream including an XML element for each  
4 request.
- 1 4. The method of claim 3 in which the XML element is a class  
2 object whose data is stored to generate XML.
- 1 5. The method of claim 4 in which the XML element includes  
2 data from a data set object.

1 6. The method of claim 5 in which the data set object  
2 includes table dictionaries, column names and data from record  
3 sets, and stored procedure parameters.

1 7. The method of claim 1 in which transferring includes a  
2 text transmission protocol.

1 8. The method of claim 7 in which the text transmission  
2 protocol is Hypertext Transfer Protocol.

1 9. The method of claim 1 in which executing comprises:  
2 de-encapsulating the encapsulated data requests by  
3 parsing into request statements; and  
4 executing the request statements.

1 10. The method of claim 9 further comprising:  
2 translating responses from the executed request  
3 statements into an XML format; and  
4 sending the XML formatted responses to the first system.

1 11. A distributed application method comprising:  
2 converting application requests in a first system;  
3 transmitting the converted application requests to a  
4 second system over a network;  
5 parsing the converted application requests in the second  
6 system into request statements; and

7           executing the request statements in the second system.

1       12. The method of claim 11 in which converting comprises:

2           generating a data structure for storing data and  
3       parameters related to an application that produced the  
4       application requests;

5           translating the application requests into a standardized  
6       delimited data structure stored in a memory of the first  
7       system; and

8           transforming the standardized delimited data structure in  
9       conjunction with the data structure into a stream of text  
10      based data utilizing a Extensible Markup Language (XML)  
11      format.

1       13. The method of claim 11 in which the parsing comprises:

2           breaking down the converted application requests to an  
3       executable command format utilizing data and parameters  
4       related to an application.

1       14. The method of claim 13 in which executing further  
2       comprises evaluating executable commands prior to execution in  
3       the second system.

1       15. The method of claim 14 in which executing further  
2       comprises evaluating results generated by the executable  
3       commands.

1 16. The method of claim 15 further comprising:  
2 converting the results into a stream of text based data  
3 in a standardized XML format; and  
4 transmitting the converted results over the network to  
5 the first system.

1 17. An application server method comprising:  
2 generating a first data structure for storing data and  
3 parameters related to an application residing in the server;  
4 translating application requests from the application  
5 into a delimited second data structure stored in a memory;  
6 generating a stream of text-based data in an Extensible  
7 Markup Language (XML) format from the second data structure.

1 18. The method of claim 17 in which the first data structure  
2 includes database tables, procedure results from logic calls  
3 and status/error messages.

1 19. The method of claim 17 in which the second data structure  
2 includes an element for each of the application requests.

1 20. The method of claim 19 in which the element is a class  
2 object.

1 21. A method comprising:

2 in a server, receiving a stream of text-based data in an  
3 Extensible Markup Language (XML) format;  
4 parsing the stream into request statements; and  
5 executing each of the request statements.

1 22. The method of claim 21 in which executing further  
2 comprises intercepting the request statements prior to  
3 execution and applying additional logic based on a type or  
4 content of the request statements.

1 23. The method of claim 21 in which executing further  
2 comprises applying additional logic to responses generated  
3 from executing the request statements.

1 24. The method of claim 21 further comprising:  
2 converting responses generated from each of the executed  
3 request statements into an XML format.

1 25. A computer program product residing on a computer  
2 readable medium having instructions stored thereon which, when  
3 executed by the processor, cause the processor to:  
4 convert application requests in a first system;  
5 transmit the converted application requests to a second  
6 system over a network;

7 parse the converted application requests in the second  
8 system into request statements; and  
9 execute the request statements in the second system.

1 26. A computer program product residing on a computer  
2 readable medium having instructions stored thereon which, when  
3 executed by the processor, cause the processor to:

4 generate a first data structure for storing data and  
5 parameters related to an application residing in the server;

6 translate application requests from the application into  
7 a delimited second data structure stored in a memory;

8 generate a stream of text-based data in an Extensible  
9 Markup Language (XML) format from the second data structure.

1 27. A computer program product residing on a computer  
2 readable medium having instructions stored thereon which, when  
3 executed by the processor, cause the processor to:

4 receive a stream of text-based data in an Extensible  
5 Markup Language (XML) format;

6 parse the stream into request statements; and

7 execute each of the request statements.

1 28. An enhanced graphical user interface (GUI) method  
2 comprising:

3 displaying a plurality of visual controls on an  
4 input/output device; and

5 displaying at least one data enabled control on the  
6 input/output device.

1 29. The method of claim 28 in which the data enabled  
2 control comprises a control having properties describing data  
3 relationships to the control.

1 30. The interface of claim 29 in which the data enabled  
2 control further comprises properties describing locations of  
3 data and data sources pertaining to the control.

1 31. The method of claim 28 in which the data enabled  
2 control is user-configurable.

1 32. The method of claim 30 in which the properties  
2 comprise:

3 a location of a database table;  
4 a name of the database table; and  
5 a column name representing the control.

1 33. The method of claim 32 in which the properties  
2 further comprise:

3 a listing of table relationships;  
4 an indicator to indicate whether the control is a  
5 key column in the table; and  
6 an indicator to indicate whether the control is a  
7 primary key column.

1           34. The method of claim 33 in which the properties  
2 further comprise:  
3           an indicator to indicate whether the control is part  
4 of a compound primary key;  
5           an indicator to indicate whether a record is locked  
6 when in use; and  
7           an indicator to indicate whether the control if data  
8 in the control has changed.

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